

**Remarks:**

The Applicants would like to thank the Examiner for carefully reviewing the specification and claims. The Applicants are particularly appreciative that the Examiner has found claims 3 and 9-19 to recite allowable subject matter. The amendments above and the remarks which follow are intended to be responsive to the grounds of rejection and objection cited in the Office Action of April 7, 2005.

**1. Objections to the Drawings**

The drawings were objected to for failing to show each and every element recited in the claims. In particular, claim 16 recited a first switch and a second switch operatively connected between source electrodes, a current source, measuring electrodes and a digital voltage measuring circuit. The functions of the first and second switches are performed in one embodiment, shown in Figure 5, by a controller. Claim 16 has been amended to recite the controller having the operative connections shown in Figure 5. Claim 17 has been canceled, because it recited the controller. Claims 18 and 19 have been amended to depend from claim 16.

**2. Claim objections**

Claim 15 was objected to for a minor informality. Claim 15 has been canceled, and its subject matter effectively included in claim 1, as amended. The objectionable extra word “at” has been removed in the amendment, such that the objection should not carry to claim 1. The Applicants believe that the foregoing is responsive to the objection.

**3. Claim Rejections – 35 U.S.C. § 103(a)**

Claims 1, 2 and 4-8 stand rejected as obvious over Tamarchekno (U.S. Patent No. 5,809,458) in view of Gissler et al. (U.S. Patent No. 5,680,049). To the extent the rejection may apply to amended claim 1, the Applicant notes that claim 1 has been amended to include the limitations of claim 15, which the Examiner found to be allowable.

Claims 2-14, 16, 18 and 19 ultimately depend from claim 1 and are therefore allowable for at least the same reasons advanced with respect to claim 1 as amended.

New claim 38 recites the subject matter of claim 9 in independent form, including all the limitations of the base claim and any intervening claims. Claim 9 was also found to recite allowable subject matter by the Examiner, and thus, claim 38 is believed to be allowable. New claims 39-54 correspond to claims 2-8, 10-16, 18 and 19. Because claim 38 is believed to be allowable, claims 39-54 are believed to be allowable for at least the same reasons advanced with respect to new claim 38.

New claim 55 recites the subject matter of claim 3 in independent form, including all the limitations of rejected base claim 1 and intervening claim 2. The Examiner found claim 3 to recite allowable subject matter, and thus claim 55 is believed to be patentable for that same reason. Claims 56-70 ultimately depend from claim 55 and are patentable for at least the same reasons advanced with respect to claim 55.

Claims 20-37, being drawn to a non-elected invention, have been canceled.

The Applicants believe that this Response is fully responsive to each and every ground of rejection and objection stated in the Office Action of April 7, 2005, and respectfully request early favorable action on their application.

Respectfully submitted,

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